THE GENESEE FARMER.

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THE FARMER.

SATURDAY, JULY 20 1833.

CORRESPONDENCE.

From the letter of one of our esteemed correspondents near Philadelphia we make the following extracts:

BREMEN GEESE.

One of my neighbors who is very curious about his poultry, has Bremen Geese. He procured them last spring when they were only a few weeks old; and early in the fall, one of them weighed sixteen pounds without fattening. They would probably weigh twenty pounds each at this time. They are snow white, and most beautiful creatures. I hope soon to obtain some of the young brood.

OLD PEAR TREES.

One of the Bell Pear trees at the back of our house is nearly one hundred and twenty years old. The other is a sucker from it, and both continue to bear abundantly.

ORCHARD GRASS.

Some of our farmers who have a rich soil, cultivate the Orchard Grass with profit. It would be more grown if its successful culture did not interfere with the usual rotation of crops in this district. It may be sown with clover and timothy: it will then come to its best, after these grasses have declined. A better plan however, is to allot a field or two for its exclusive culture, where it must remain unploughed for many years.

THORN HEDGES.

The Potomac thorn is used for hedges in these parts on account of its rapid growth and quick maturity. The Pear leaved or New Castle thorn is likely to be more durable, but requires more time to form an efficient hedge.

INDELIBLE INK,

FOR MARKING LINEN.

Indelible ink for marking linen is a cheap article, and in many instances much good results from having our linen marked with this article, or some other way. It is made in the following manner:

In four ounces rainwater, dissolve four drachms lunar caustic; when the solution is clear, add sixty drops infusion of nut galls made by pouring one gill of boiling water on two drachms powdered galls.

THE WASH.—Dissolve one drachm pearlash and half a drachm gum Arabic in one gill rainwater, with which wet the linen before you write on it. Nut galls per oz. 6*d*, lunar caustic per oz. 6*d*, Gum Arabic per oz. 6*d*., therefore, the cost is trifling. Z.

SHEEP HUSBANDRY,

We have heard it remarked by some of the best farmers of Dutchess, will ensure the gradual improvement, in fertility, of a farm. The following extract comes in corroboration of this opinion. It is from "*Reports of Select farms*," No IV. and has reference to a Gloucestershire hill farm:

"The improvement of the soil which he occupies, ought to be the object of every farmer. Land, in a natural state, if dry, undergoes a gradual improvement from the yearly growth and decay of the vegetable substances which grow upon it. But if the vegetable substances which grow upon it are eaten off by sheep, which drop their dung in return and in small portions at a place, the improvement goes on much more rapidly. Hence land that is always pastured by sheep, is always improving, while that which is always mown is deteriorating. The number of sheep, therefore, kept on this farm, tend much to its gradual improvement; and the regular deposition of the sheep's dung over so great a portion of the farm, every year, in consuming the turnep crop, is an excellent preparation for the course of cropping that is to follow. The double manuring which the land thus gets in the same year, may be thought by some to be too much; but the land of this farm and the whole district is so thin and brashy, that it can hardly be overdone with manure."

The same lady who gave us the last receipt from Dr. *Kitchener*, has also obliged us with the following which she has tried and approves; and as we have the promise of more selections for our columns from the same hand, we shall mark this

No. II.—NOTTINGHAM PUDDING.

Peel six good apples, take out the core with the point of a small knife, or an apple corer, if you have one, but be sure to leave the apples whole, fill up where you took the core from with sugar, place them in a pie-dish, and pour over them a nice light batter, prepared as for batter pudding, and bake an hour in a moderate oven.

REVIEW OF LINDLEY'S GUIDE TO

THE ORCHARD AND FRUIT GARDEN.

The *yellows* in peach trees, a subject of great importance to the Horticulturists of this district, has been discussed by the American Editor; and his views of its nature will be presented in the following extracts:

"About twenty or twenty-five years ago, peaches were raised here in the greatest abundance, and with only a moderate share of attention, in great perfection. That time however, has gone by; and whether we are to attribute the failure of the peach trees in the Northern States [?] to a change which has taken place in the climate [!] since that period, or to the worms which attack the roots [!]—to both these causes or to any others, cannot be perhaps satisfactorily ascertained.

——"The trees of late years are subject to what has been deemed a disease called the *yellows*, from the circumstance of the trees having a yellow sickly appearance; much curious philosophy has been spent on this subject without arriving at any satisfactory conclusion. I shall hazard an opinion on the nature of this supposed disease, after stating some observations I made on my young peach trees last spring (1832) and the following summer.

"It will be recollected that the fall of 1831 was remarkably mild, and vegetation was prolonged to near the middle of November; at the end of that month and in the beginning of December, the cold weather set in very suddenly, the thermometer gradually sinking until it fell below zero in New-York, and to the north and east of us some eight or ten degrees lower. To this sudden change of weather I attribute the cause of so many young trees (and many old ones too) being killed to the north and east of New York, particularly young pears and cherries. I lost a few cherry and pear trees in places where they were most exposed. The peach trees in similar situations were not killed, but many of them were injured, although it did not prevent them from putting out their leaves, blossoming and bearing fruit in the summer; the leaves growing weakly, and of a yellowish sickly appearance. In the spring, although to all outward appearance, the tree had sustained no injury; yet in cutting the shoots a blackness appeared in the heart or medulla of the shoot: in some quite black, others had black dots round and in the pith. Some of these trees I cut down to the budded part, and discovered that the same blackness of medulla appeared in the main stem as were in the smaller branches; others that showed this character, I left standing: these put out their leaves, and ☞ripened their fruit prematurely, without having any thing of the true flavor; and what is remarkable, every diseased tree, of whatever kind, seemed to bear the same red, and red speckled, tasteless and insipid peach; some of them coming to maturity a month too soon.☜ I have no doubt these trees had the *yellows*, as it is called; neither have I any doubt concerning the cause of it; as all the trees injured were perfectly sound and healthy the summer previous; and those trees only that were thus exposed in a certain direction, were thus injured."

We are willing to admit this *statement*, (excluding the *inferences*;) and also admit that the disease was the *yellows*; but we are surprised that not one word is said of its contagious nature. When such defective views are circulated, it would be a dereliction of our duty, were we not to warn our western horticulturists of the danger of admitting this pest into their gardens.

Neither any of our friends, with whom we have conversed on this subject, nor ourselves, had ever seen the *yellows* in the Genesee Country, till it was introduced from the neighborhood of New-York. Thirty years had elapsed without producing any such disease in this climate. The peach worm through all this period had been active, occasionally *girdling* and destroying a few trees; while others where the injury was less extensive, had pale or yellowish leaves,—but the suckers from the root, were fresh and vigorous. Soon after the disease was imported however, we began to witness its ravages. A friend of ours in less than a year after he had set *infected* buds into the most healthy stocks, was surprised to find them dying or dead; and not a peach tree in his grounds, that had been subjected to the contagion in this manner, survived.

We have no disposition to complain of the American Editor for not having pursued his inquiries to more advantage; or for not having better made up his mind on a matter of such vital importance to the fruit gardener. We shall let all that pass; and offer for the benefit of our readers a succinct account of this disease from the pen of William Prince, Esq. of Flushing.

"This disease which commenced its ravages in New-Jersey and Pennsylvania about the year 1797, and in New York in 1801, and has spread through several of the states, is by far more destructive to Peach trees than the worm, and *is evidently contagious*. This disease is spread at the time when the trees are in bloom; and is disseminated by the pollen or farina blowing from the flowers of diseased trees, and [infecting] the flowers of those which are healthy; and which is

quickly circulated by the sap through the branches, foliage, and fruit,—causing the fruit wherever the infection extends *to ripen prematurely*. That this disease is entirely distinct from the *worm*, is sufficiently proved by the circumstance, that peach trees which have been inoculated on plum or almond stocks, though seldom affected by the worm, are equally subject to the *yellows*—and a decisive proof of its being contagious is, that a healthy tree, inoculated from a branch of a diseased one, instead of [restoring the bud] to vigor and health, *immediately becomes itself infected with the disease.*

"As soon as a tree is discovered to possess the characteristics of the disease, which is generally known by the leaves putting on a sickly yellow appearance—but of which *the premature ripening of the fruit is a decisive proof*—it should be marked, so as to be removed the ensuing autumn, which must be done without fail; for if left to again bloom, it would impart the disease to many others in its vicinity Care is also necessary, in its removal, to take out all the roots of the diseased tree, especially if another is to be planted in the same place, so that the roots of the tree to be planted, may not come in contact with any of those of the one which was diseased." V.

LEISURE MOMENTS--No. XIV.

THE MENAGERY.

'Menagery is derived from the French word menager, from which we derive our English verb to manage. The name Menagery was originally applied to a place for domestic animals, with reference to their nurture and training: it now means any collection of animals. It may be implied, therefore, that the animals in a Menagery are not placed there merely for safe confinement, but that by care and kindness their noxious and ferocious propensities may there be restrained or subdued, and by constant discipline their habits may there be rendered useful, or at least inoffensive, to man. The commonest animals offer to the attentive observer objects of the deepest interest. To those who philosophize, or to those who do not, the instinct and intelligence of animals are always interesting; and to a feeling mind they are doubly so. The poet Cowper when he sat in his study for hours, watching the gambols of his then tame hares, forgot that gloom which constitutionally preyed upon him, in his sympathy with the innocent happiness of the poor beings whom he had taught, first not to fear him and afterwards to love him. All associations between animals of opposite natures are exceedingly interesting; and those who train animals for public exhibition know how attractive are such displays of the power of discipline over the strength of instinct. Upon the Surrey side of Waterloo Bridge, or sometimes, though not so often, on the same side of Southwark Bridge, may be daily seen a cage about five feet square, containing, the cat, the rat, the mouse, the hawk, the rabbit, the guinea-pig, the owl, the pigeon, the starling and the sparrow, each enjoying, as far as can be enjoyed in confinement, its respective modes of life, in the company of the others,—the weak without fear, and the strong without the desire to injure. It is impossible to imagine any prettier exhibition of kindness than is here shown. The rabbit and the pigeon playfully contending for a lock of hay to make up their nests; the sparrow sometimes perches upon the head of the cat, and sometimes on that of the owl,—each its natural enemy; and the mice playing about with perfect indifference to the presence either of cat, or hawk, or owl. This is an example and a powerful one, of what may be accomplished by a proper education, which rightly estimates the force of habit, and confirms, by judicious management, that habit which is most desirable to be made a rule of conduct. The principle is the same, whether it be applied to children or to brutes.

GOOSEBERRIES.

Messrs. Editors—A writer in the Farmer of June 1st, bundles up in a pet nearly the whole 700 varieties of English gooseberries, and casts them at once to the brush heap, as good for nothing. Now this is doing business to be sure by the wholesale—for himself, the gardener, and the nurseryman; whereas, it appears to me he should only do it for himself, in which case he has an undoubted right to choose his own style and perform his work in his own way. The article, however, is handsomely written, and amused me much, and the writer reminded me of the story of an elderly gentleman whose patience caught the bit and ran with him in a similar style, but under circumstances far less vexing. I will recite, as near as my memory serves me, the race, and consequent disaster and loss, which was nearly as follows:

"By the side of a murmering stream
As an elderly gentleman sat,
On the top of his head, was a wig,
And atop of his wig, was his hat.

The wind it blew high and blew strong,
As the elderly gentleman sat,
And bore from his head in a trice,
And plunged in the river his hat.

The gentleman then took his cane,
Which lay by his side as he sat,
But he drop't in the river his wig,
In attempting to get out his hat.

His breast it grew cold with despair,
And full in his eye madness sat,
So he flung in the river his cane,
To swim with his wig and his hat."

But to be serious, Messrs. Editors, I have no idea of giving up the gooseberry yet; though the complaint against them is a serious one it has not become general. I have a number of trees that are ten years old—have been transplanted three times into as many different soils, and I have never known them to be injured by mildew but once, and that was a very wet season, and then but slightly. I have now in my garden and nursery four or five hundred in full bearing, and they make a fine show of fruit; some of them are of the largest class, but the greatest part are of the smaller sorts, which I think are the best flavored and most sure bearers; about two hundred of them are the white amber; this I consider one of the choicest sorts, not large, but constant bearers and fine flavored. I have not failed of this sort of fruit for seven years, though not every year an abundant crop. I have tried them in a variety of soils, in sun and shade, and have found by experience that hard clayey land is far the best---they will not do as well for the first year or two, but as soon as they become well rooted they seem perfectly at home. They will bear considerable shade, and in light sandy ground absolutely require it. I never had better and cleaner berries than I raised for several years on plants which composed one fourth part of a hedge, the other three fourths the common white thorn, planted on a bank raised two feet high by earth thrown out of a ditch which contained water the greater part of the summer. I have taken some of the same plants and have them now in light sandy ground, but they do not bear as constantly as those in the clay, and are sometimes cut off by frost, owing to their putting out earlier in the spring than they would do in colder ground; and on examination I find those on clayey ground perfectly clean, while in the same rows others terminating in sandy soil are affected with mildew. I do not believe there is any other remedy but choice of soil—keeping them well thinned and open in the top—taking out all the bearing spurs near the stem and suffering only the lateral branches to bear fruit, and I should add, use no other than cow manure about them. Pursuing this course I have no doubt but we may have a good crop of this fine fruit at least two out of three years, and that is oftener than we obtain plums and peaches generally in this county, and yet the plum and peach for their occasional delinquency are not cast to the—brush-heap; but even allowing that they fail one half the seasons to ripen clean, still they would be valuable to every lover of gooseberry pie. They are the first in the season fit for use in cooking, bring more in the market and are generally preferred before currants; so that they are worth the trouble and expense of raising to use only while green. I have never known them to mildew until after they have attained to a size proper for cooking purposes. So that as long as the fruit and plants sell well, and customers do not complain of mildew, if they do not find a place in my nursery and garden, then set me down as a "gooseberry fool." A. BRYANT.

Buffalo Horticultural Garden, June, 1833.

THE LARGE OATS.

A distant correspondent asks where the large oats can be obtained that weigh *forty-eight pounds* to the bushel? and at what price? We hope some of our readers will answer the inquiry.

☞The Cortland Advocate copies two Nos. of Judge Buel's Hints to Farmers from this paper, without *credit*.

WILLOW HEDGES.

It is, I believe, generally allowed that indigenous shrubs and trees are better calculated to form lasting hedges in this country, than are those of foreign origin. I have seen various kinds of indigenous shrubs, &c., recommended in the Farmer, for this purpose, but do not recollect that the Willow is among the number. Now it is well known that the different varieties of willow are very easily propagated by cuttings and that they will grow in almost, if not quite, all the different soils of our country. The willow is not apt to produce sickness far from the main stem, and taking all things into consideration, I think it promises to be a valuable substitute for the many foreign shrubs which have been tried in this country for hedges. I intend, next spring, to try an experiment with it, unless some other person has already done so, and will publish the result in the Farmer. The way that I propose to form the hedge is this: procure cuttings of from ½ an inch to one inch in diameter, and five or six feet long, stick them into the ground far enough to ensure their taking root, and say four inches apart in the first row, and at an angle of say twenty degrees

from a perpendicular standing with the row. Then stick another row half way between these, and standing the other way on the same angle, and wattle or weave them together. Their tops, when they grow, will prevent them from *raveling*, and I think in this way a hedge may be made, that in two years will fence against pigs, (both biped and quadruped) cattle, &c., &c., and with less expense than in any other way. W. H.

N. Almond, June 25, 1833.

"THE BOOK OF NATURE."

We have had an opportunity of examining the first number of this work. It consists of 8 quarto pages, letter press printing, and 10 plates of the same size.—The first and second plates are occupied with 13 figures in *Ornithology*—the 3d, has 5 figures in *Conchology*—the 4th, *Entomology*, 5 figures—the 5th, *Quadrupeds*, 2 figures—the 6th, *Ichthiology*, 4 figures—the 7th, *Botany*, 12 figures—the 8th, *Amphibia*, genus Boa, 3 figures—9th *Crustacea*, genus Cancer, 4 figures—10th, *Vermes*, order Zoophytes, genus Tubularia.—The work is to be continued monthly for two years, during which time the subscribers will receive about 200 plates, embracing a large number of figures in the several departments of the great Book of Nature, with descriptions of each, for the sum of $10. It is a useful, ornamental, and cheap work, well worthy the patronage of the public.

SHEEP.

Of all domestic animals, the rearing of sheep is to the husbandman the source of most pleasure and profit. Their management then, and a means of protection for them, will deserve from us a passing notice.

It may be said, that of all kinds of stock sheep require the least attention and expense from the farmer. The sheep is the only animal subjected to the control of man, which will voluntarily endure abstinence from water, requiring it only in the event of being housed. Sheep, when confined in an enclosure, would require no attention, had the farmers any protection or security for them, against attacks from their dread enemy the dog—in whose presence they uniformly discover an instinctive though justly excited panic.

Permit us to inquire into the advantages of sheep and stock, before we indulge in remarks on their management. A principle in farming which should be more generally reduced to practice is, that previous to laying in stock, the farmer should calculate what species, for a certain amount of money, will realize the largest net profit,—making due allowance for a fluctuating market. Suppose a farmer has sixty dollars to invest in stock, which in the month of July or August will buy him forty good ewes. If they be managed according to our subjoined directions, and kept one year, we think the annexed statement, if not exactly, will be very nearly answered.

10 good sheep will have 150 lbs. wool, at 40 cents,	$60 00
40 lambs, fat in August, worth $2,	80 00
40 ewes, when fat, will advance in price 50 cents,	20 00
Clear gain,	$160 00

A careful and judicious experiment will prove the above statement to be perfectly practicable. We have known the amount of wool from the same number exceeded both in price and in quantity. We have known the number of lambs increased 50 per cent. Some may ask the question, how realize even the statement, save the increase? Before the reader bas marvelled at our statement, we submit the management and means. 1st. By extreme caution in the selection and purchase; choosing such only as have a good vigorous coat of wool; avoiding age, which should not exceed four years—the mouth being the best index to the age. 2d. By paying attention that the male be admitted and kept with them, from the middle of November, and a due regard to the naxim, "*A sheep fat will never fatten again.*" 3d By attending them in winter and in yeaning time, with scrupulous care.

Although sheep feed sparingly, yet it is important that they have plenty of the best clover hay during winter; and in the yeaning season, (ewes go five months with young,) they should be provided with a hovel, to protect the yeanlings from all wet and excessive cold weather At this season, the feed for the ewes should consist of bran, chopped oats and corn, mixed in equal quantities—allowing each one pint per day, and giving them one half in the morning and the other in the evening. This feed is admirably calculated to increase their milk—the grand mystery in raising lambs. Whole grain must be avoided. It invariably disposes the fleece to waste and drop off more or less before shearing time. When the pasture is insufficient alone to support them in winter, they should be kept in a yard or ploughed field, for such is their inclination for green food, that while they can get a mere taste of it, they will suffer on hay. If the ewes are of good size, the majority will produce two lambs. It is necessary to see to the lambs for several days after they are yeaned, and ascertain whether they are acknowledged by the ewes, or suck. If so, there is no danger; they do well, provided they have shelter, and the ewes are regularly fed; in which case it will be nothing extraordinary to raise all. It may not be irrelevant to state, that lambs must be kept where old breeding sows cannot come in contact with them—a voracious enemy, which will soon swallow them alive; none can be trusted. Lastly, by turning all upon good pasture about the last of May, and giving bran with salt regularly, they fatten very readily, and at that season are always in demand. The lambs will command as much as the ewes when fat. While unacquainted with the raising of sheep, we could not have subscribed to the statement above submitted; but with these directions as a guide there will be little danger. Verily then, fellow farmers, the subject must be worth your attention! Feeding cattle, or wethers, will not compare in point of profit with rearing sheep and fattening on pasture.

It may be added, that ewes can be procured for considerable less money than wethers. If the sheep hovel be well supplied with litter, the amount of manure will also exceed that of any other stock, in which the same amount of money has been invested. Sheep manure, for fertilizing properties, ranks next to that of pigs.—*Lancaster Examiner.*

EARLY GREEN CORN.

We have for several years had a variety of early corn of a very extraordinary kind, both as to quality and the season at which it comes into use. We have never failed having it on our table about the first of July till this year, and this exception was caused by an accidental omission to plant till the 20th of May—and it is even now in full flower, and will be ready for use by the 20th inst. A few persons who have tried it this year, have informed us of the result. Mr. P. J. Frieze's gardener sold some of it in our market on Friday, 21st of June, and Mr. Frieze had it on his table the 23d of June. Mr. Wm. H. Foot, of Alexandria, writes to us under date of June 25, that he had been eating this corn for more than eight days; and that he has no doubt of having it next year in the first week of June. He says it is small, yet it is sweet and good. The ears of this corn are about eight to ten inches long, and one and a half to two inches in diameter. The grain is pure white, and of a good size and depth, and of a most delicate flavor—it is in all respects incomparably better than the small yellow corn, heretofore the first in season, and three to four weeks earlier. Notwithstanding the great superiority of this corn, we have heretofore been unable to induce our gardeners to adopt it, except in a very few instances. It will work its way, however, for gardeners will hardly stand by and see *one* of their profession monopolizing the market, and selling green corn at 37½ cents a dozen, for three or four weeks, as has been the case with Mr. Frieze's gardener this year, without making an effort

This corn is the result of an attempt at improvement made by the Editor of the American Farmer. He obtained the earliest white corn to be found, and by planting early, and each year selecting the first formed ears for seed, has brought it to the state above described. It grows only four to five feet high, to the top of the tassel; has generally two to four ears on the stalk; bears planting three feet apart, and three stalks in the hill.—*American Farmer.*

From the New England Farmer.

PRODUCTIVE FARM.

My farm is a stiff clayey soil, rocky, uneven, hills and valleys, particularly adapted to the growth of fruit trees, such as pears, apples, peaches and cherries, of which I have about 200 thrifty trees of the choicest varieties, most of them in a bearing state; besides mulberries, quinces, grapes, &c. It contains 160 acres, 20 of wood, the remainder mowing, tillage and pasture land, all in one body, with the great mail road from Boston to Washington running through the center. I get my living by farming, and keep my eye steadily on the profits of my farm, which must exclude every thing like overwrought agriculture, or extravagance, from the premises.

The following items may not all be perfectly correct, but are so nearly so as to answer my design, and give a sum total varying but little from the truth. I would remark, that in consequence of sickness in my family last summer, and other causes, my dairy did not receive that attention, and was not nearly so productive as it otherwise would have been.

DAIRY.

Most of my butter was sold in Boston by Col. Maynard, and brought from 17 to 28 cents per lb. About 350 lbs., the most sold at any one time, brought 24 cts.—we will call the whole 22 cts. lb.

Butter, 3487 lbs. at 22 cts.	$767.14	
New Milk Cheese, 1575 lbs. at 9 cts.	141.75	
Cheese, 735 lbs. 4½ cts.	33.07½	
Do. 1526 lbs. 3 cts.	45.78	
Veal, and 4 calves that were raised,	151.47	
Total of Dairy,		$1139.21½

BEEF.

I fatted 9 cows, and one ox that weighed 1005 lbs. One bull six years old, which I raised on skimmed milk, and with his mate, a stag, did most of the ox work on my farm for four years. He had 85 lbs. of rough tallow, and weighed 1209 lbs. The ox, bull, and 9 cows, amounted to $308.36. Four oxen were sold by Col. Fay, at Brighton, to G. Adams, for 39s. cwt. The whole amount for beef was $603.44

PORK.

I fatted 19 hogs which I bought of Theodore Smith, that he drove to Columbia county, N. Y. Their average weight, when I bought them, was 86 lbs. I kept them through the winter on English turneps, boiled with a little, and but a little, corn and cob meal put with it. When slaughtered 14 of the best averaged a fraction over 500 lbs. each; 15 of them were carried to Boston, and sold for 7½ cts. The hogs amounted to $651.82

Total of Dairy, Beef and Pork,	$2394.47½

The above is the produce of one year, commencing March 25, 1832, and ending March 25, 1833. SAMUEL CHAMBERLAIN.

Westborough, 1833.

COMFORT FOR HORSES.

Rub oil, (tanner's oil is the best,) over the parts of horses most exposed to annoyance from flies, and they are perfectly protected against their tormentors. "The merciful man is merciful to his beast," and he who will not guard his horse against flies deserves to be fly-blown himself.

☞ Peaches, Tomatoes, and green Corn, were for sale in the Philadelphia market on the 10th inst.

GERMINATION OF SEEDS.

It is often said of certain seedsmen that they are in the practice of selling *bad seeds;* that is, either seeds that have been kept too long to vegetate, or seeds in which the vital principle has been purposely destroyed by *baking*. The supposed design is to increase the sale, so that when the cultivator has sowed one paper, he may be induduced by its failure to purchase another.

To these charges, I make no reply, except that I am satisfied *good seeds often fail to grow.*

I sowed some of the scarlet Havannah tobacco, from which I had not a single plant. This proof of its being bad was about as strong as people commonly have, when they condemn a parcel. The next year however, I sowed some from *the same parcel of seeds* when they were *one year older*, and had as many plants as I wanted.

Latterly when I obtain rare seeds not *known* to grow freely, I sow them in as many different situations as are likely to prove favorable. Some seeds will grow in almost any part of the garden; but others are brought to germinate with difficulty; and *it is not uncommon to have them growing in one spot when they entirely fail in every other.* Of this I have several instances in the present season. The failure of rare seeds to grow in common gardens, I should scarcely consider as any proof that the seeds were bad.

To understand this subject we must remember that seeds of this sort are generally from climates very different from our own; and to a different temperature, and a different degree of moisture, we often add a difference of soil. The seeds of our wild plants are sown by Nature in vegetable earth, and in the shade. Many of them refuse to germinate in cultivated land. Who would think of raising from seed the *Orchis*, or the *Cypripedium*, in a common garden? Or even *Gerardia flava* or *Gerardia glauca* which are sure to dwindle and perish in the open sunshine?

Many seeds are very small, as those of *Mimulus.* If these have much more than a sprinkling of fine earth over them, they are irretrievably lost. They must be left then, near the surface. But if this be allowed to dry, they cannot grow. If they sprout during wet or cloudy weather, the first hot sunshine may dry the earth deeper than their *very short roots* penetrate; or its heat may destroy them. These plants, from their small size and brief duration, may not be observed; and the seeds from which they have sprung will of course, be condemned.

I must here make a digression. Very small seeds, after being slightly covered with vegetable earth on the north side of a fence or wall, may be further protected with fine brush,—particularly with the leafless branches of hemlock. I have used it with great advantage. While it admits light enough, it intercepts the direct rays of the sun, and prevents the wind from drying the surface of the ground. As the plants acquire strength, a part of the brush may be removed from time to time.

Seedling plants are sometimes not found so soon by the sower as by insects. I lately sowed *Petunia nyctaginifolia* in two places: in one spot the plants grew well; in the other they were totally destroyed by insects soon after they came up; and had I examined the spot one day later, I should probably have concluded that the seeds had not germinated.

In garden beds where seeds have been evenly sown, the young plants often appear in distant patches leaving wide spaces unoccupied. This is no proof that the seeds were bad. Either insects have destroyed the plants that grew intermediately, or some parts of the ground have been more favorable to the germination of the seed, than other parts; and the latter suggestion is by no means improbable. Even in hot-beds where insects intrude more seldom, we may often observe one part of a short row crowded with plants, while in another part, only a few inches distant, not a plant can be found.

The seeds of some plants germinate very sparingly, as *Nuttallia pedata.* By no treatment which I have yet given them, has more than one plant been produced among thirty or forty seeds.

It is doubtful if seeds of *Dictamnus* can be made to grow after they once become dry. I have never succeeded with them after they had been kept a few weeks in the house.

Some seeds seem to be more perfect in certain years. I have had to increase the white *Polemonium cæruleum* by division; but in the present season, I have many hundreds of young plants from seeds naturally scattered.

I therefore conclude that seedsmen ought not to be so charged, unless the proof be more direct than a simple failure of rare seeds under common culture.

D. T.

Greatfield, 7 mo. 6, 1833.

Agricultural Improvement---No. 4.

MORAL CULTURE.

While Agriculture, Horticulture, Arboriculture, &c., are receiving the increased attention which they so richly deserve—while efforts are making by the learned and patriotic to disseminate knowledge, and introduce improvement in all the various branches of husbandry—how important that they should not neglect *Moral Culture*, or the improvement of themselves. We all have moral duties which we owe ourselves and our fellow men. To mitigate the unavoidable ills of life—to ameliorate the condition of the human race, is the desire of all good and philanthropic men. I would particularly at this time beg leave to call the attention of our agricultural community to that most laudable of all moral enterprises—the promotion of temperance. I do so because they are interested in a two-fold way. Firstly, they are interested in the cause of good morals and good order in society, and secondly because it has a direct bearing upon the success of their agricultural labors. Much has been and more remains to be done by them to alter the tone of public sentiment, and introduce reform on this subject. Arguments would be superfluous at this time to prove the utter inutility, nay the destructive tendency of the use of ardent spirits, by men in health. Why then should farmers continue to furnish it, for themselves and their laborers? Why should they introduce into the system that poison that may tend sooner or later to destroy both soul and body? As you value health, reputation, property, the peace of society and even life itself, abandon wholly the use of ardent spirits. But methinks I hear some of you say, "it is essential in the harvest-field, and in various kinds of work." Laying aside all theory (which bye the bye is all in favor of total abstinence) my own experience and practice for five years controvert you direct. I was formerly in the habit of using in the course of a season, on the avarage about a barrel of ardent spirits. I had much difficulty arising from its use. I found it impossible to procure men who would not at times drink to intoxication, and all would be more or less excited. Noise, disturbance, quareling and even fighting was the legitimate consequence. Every thing went with a hurra! and scarce a day passed without some considerable loss. Work half done—a waggon or cart upset—teams running away—here is a cradle smashed—and then a rake or fork is broke or lost—all is constant clamor and confusion. This is no exaggerated history of almost every day during the busy season of harvesting. The cause of all this trouble is to be found beside yonder spring under the shade of a wide spread elm, contained in a small black bottle. I became convinced of the necessity of reform, and from thirty gallons the next season I came down to five. The effect was at first to produce rather protracted faces, but I had more labor performed—more order and every way less trouble. So strongly became I convinced this season of the correctness of the policy, that I shut down the gate at once, and adopted the motto—"No more rum—no more hanker"—No more ardent spirits to be drank on my farm. But said some, "how will you get your work done? In vain will you search for laborers on that condition." As a matter of precaution, I offered a shilling more a day, and my meadows and harvest field were filled by more respectable and intelligent men than ever before. I gave them melasses and water, milk and water, and sometimes a little spruce beer, and the consequence was that my business progressed faster, more was accomplished and in better order than ever before. No noise, no confusion, and the men themselves acknowledged, that they felt stronger and more able to endure hardships than when accustomed to ardent spirits. Since I have wholly abandoned its use, I wash from two to five hundred sheep annually without rum, and I have now an honest "son of Erin" in my employ, engaged in the useful occupation of draining or ditching, who stands from morn till night, from six to eighteen inches in mud and water and asks or craves not a drop of liquor. On being interrogated on the subject, he says, "give me plenty of good wholesome food, and the idler and the vagabonds are welcome to the rum. I've not tasted a drop these eighteen months though exposed in all kinds of weather, and I never enjoyed so good health in all my life." So signal was my success and so beneficial the results of the course I adopted that many of the most intelligent in my vicinity have followed the example. Will any farmers then continue with such facts staring them in the face, the use of this accursed poison? Will they make their farms nurseries of vice and their laborers candidates for ruin, and perhaps through its influence, end their lives in the states-prison or on the gallows? Will they expose themselves by the constant use of ardent spirits, to all the horrors of the drunkard? Will they run the risk of their sons imbibing a taste which shall lead them into dissipation and end in utter profligacy and ruin? But say some, "there is no fear of me, I'm a temperate drinker, I'm sure I shall never be a drunkard." My dear friend, pardon me when I inform you, that you are on the verge of ruin. You may escape, but you may also fall. No man ever became a drunkard

suddenly, and what is more astonishing no drunkard ever was aware of his danger until he was gone. Step by step it steals upon us, until it has the soul and body under complete vassalage. You may escape, but why expose yourself for the momentary gratification of taste. But to the strictly temperate man it is no gratification, its taste is not pleasant and its effect is painful. Its relish is not natural, but acquired. The more men drink, the more they wish. Drinking creates thirst, and thirst again calls for drink to alleviate it.

This subject addresses itself to no sectional feelings for aid. It is allied to no particular party or association. It is the great cause of humanity. Like the Bible, all are interested in its realities and truths. The field of its operations is co-extensive with the habitable globe. The ravages of intemperance are far spread and wide. Desolation and ruin have followed in its train. It has blighted the hopes of many a fond father, and brought low with sorrow the grey hairs of many a tender mother. Destroyed the peace and happiness of the social circle, beggared families, filled poor-houses, jails, and penitentiaries. Wisdom and talents are no shield against it. It has staggered forth in vain strength in our halls of legislation. With tremulous hand it sometimes holds the scales of justice, and like the serpent of old in Paradise, it has wormed its way and polluted with its stygean breath the sacred courts of Heaven. Shall an enemy then, thus powerful, thus much to be feared and dreaded, not be resisted with all our energies? It appeals to our reason with force, to our feelings with touching pathos, to our philanthropy and benevolence it is irresistible. Farmers of New-York! adopt then the motto of total abstinence. "Touth not, taste not, handle not." Ardent spirits have been banished from the army and navy Thousands in our country bear ample testimony of its salutary effect. Let your great and extensive influence bear on this all important subject; the world will soon feel its effects. Future generations will rise up and call you "blessed." VOLO.

Rensselaer county, July 1, 1833.

CANADA THISTLES.

In No. 9, page 66, of the present vol. of the Genesee Farmer, I gave an effectual receipt for destroying that pest to agriculture, the Canada Thistle, and which in its application may be said not to cost any thing, for it prepares the thistle patch in a most capital manner for a luxuriant crop of wheat. I would again call the attention of my brother farmers to the subject, and to convince the most sceptical of the complete efficacy of it, I will relate one case among many where it has been attended with complete success, and where they may go and examine for themselves.

Mr. Daniel Wilson of Covington, in this county, (Genesee) having seen the beneficial effects of the method, as practiced by my brother on his farm, (and described as above referred to) resolved to try it on a most incorrigible patch of it, that had been surrendered up to the thistles for twenty years, and which were extending themselves in all directions, threatening to take entire possession of the farm. Pursuant to the directions of my brother, in the summer of 1832, he commenced ploughing them, and he found the roots of the thistles forming a complete mat or basket work, thickly crossing each other in all directions and to unknown depths. He ploughed the ground at regular intervals of four weeks for four successive times, when after the fourth ploughing, there was not a thistle to be seen, and the ground was in fine tilth for sowing wheat, loose and nice enough for any garden vegetables, and now, July 1833, there is a most luxuriant crop of wheat on the old thistle bed, and not a solitary thistle has been found, although it has been carefully examined by those interested in testing its efficacy.

I cannot but hope that another season, all afflicted with this most troublesome of all weeds, will try it, and by following the course, and doing the work thoroughly will drive it from the land.

Le Roy, July 9 1833. THOMAS TUFTS.

ON GYPSUM AS A MANURE.

We copy the following remarks on the use of Gypsum as a Manure, from the *Columbia Sentinel*, a paper which appropriates a portion of its columns weekly to Agriculture, and contains many excellent articles from the pen of one of the best farmers of Columbia County.

Last week we ventured some observations on the proper *time* for sowing gypsum.* This week we propose to go into a consideration of the question of the *usefulness* of gypsum as a manure. There is the more necessity for this, from the fact that a controversy is now going on upon this subject in the Genesee Farmer - one contending for its use, another denying that it is ultimately beneficial to the soil after a few applications. If we turn to the ninth volume of the Agricultural Magazine, we will see that comparative trials were made between this and other manures, on a stoney clay mixed with a little loam, to ascertain the best manure for wheat. "A five acre field was divided into five equal parts, exactly an acre in each. They were equally well ploughed and laid down to wheat, after being manured as follows:

On No 1 was sown 6½ bushels of gypsum.

On No 2 was put a compost manure, consisting of lime, rich earth, and dung.

No. 3 was manured by yarding cattle on it.

On No. 4 stable dung was thinly spread.

On No. 5 lime prepared from oyster shells was sown.

The product was from

No. 1, forty bushels,
No. 2, thirty six bushels,
No. 3, thirty five bushels,
No 4 thirty-three bushels,
No. 5, thirty bushels

The seed wheat was of the best Sicily kind, and weighed 62 lbs. per bushel—the product weighed 63 lbs. per bushel."

Next follow eight different experiments of the effects of gypsum on the different grasses, excepting clover. In all cases the quantity of land was the same, and the soil as much alike as possible. The result uniformly proved that the profits were from 1-4 to 1-2 greater than where none had been used. On clover the benfits were still more marked. The gypsumed yielded per acre a product of hay equal to 15
The ungypsumed only equal to 5
The gypsumed yielded in seed per acre a product equal to 30
The ungypsumed yielded in seed, do. only 5½
The experimenter adds—"The invariable results of the several experiments, which are faithfully, and he trusts correctly stated, he thinks incontestibly prove that there is a most powerful and subtle principle in this tasteless stone; but by what peculiar agency or combination it is capable of forcing vegetation in such an instantaneous and astonishing manner, time reserves for others to unfold."

From the above experiments, it is distinctly ascertained that gypsum produces its greatest effects on clover. Time and experience have confirmed this fact, and it is now generally understood that as a manure it is not so beneficial to the narrow-leaved as it is to the broad-leaved plants, such as clover and corn. Besides the above experiments, the general observation of farmers is conclusive on this point, and we could quote abundance of authority in proof of this position. I have seen one half of a field which had clover growing in it sown with plaster, and the other part remaining unsown The eye could distinctly trace the part sown from the part unsown. First from the increased size of the one, and next, from the sickly and yellow appearance of the other The line of demarcation was so observable, that the cause of it was a frequent source of inquiry. But this is only one among many similar instances. My own experience and that of my neighbors fully bears me out in the opinion, likewise, that clover, to come up well and do well, must be aided by having the ground sprinkled with plaster as soon after it is sown as practicable. This is an experiment which I have frequently made, and have long since looked upon as a settled principle in farming.

Previous to the use of plaster and clover as a manure, (for they ought to go together,) what is now called the best of land in this vicinity might have been purchased for less than $3 per acre; and I have heard of several purchases being made at less than one dollar. Now this land is made to yield the interest of $100 per acre, free of expense,—is constantly improving, and there are no farmers who thrive so well as those who are the most lavish in the application of these two manures. I verily believe, deprive them of the use of clover and plaster, and their farms would degenerate, if not as low as formerly, still so much so as to make their cultivation very unprofitable. Plaster does not do its maximum of good without it is sown on clover; and clover will not grow luxuriantly unless it is sprinkled with plaster—they mutually aid each other, and when both are freely used, they are a mine of wealth to the farmer. It is not because he has large crops of clover for hay, but this clover being turned under by the plough, is the best possible coating of manure that his fields can have to bring him heavy crops of wheat, corn and oats; not rye—his land is too good for it—it is too cheap a produce when wheat, which is more profitable, may as easily be raised. It is principally indirectly therefore that gypsum is so valuable as a manure. We are perfectly willing to concede that its good effects are not so distinctly marked as formerly; the poverty of the soil made it then so peculiarly grateful to it, that it at once yielded a hundred fold. Now the quality of the soil having meterially improved by its frequent application, they are not, of course, so observable. It ought to be enough for us that crops are growing more and more abundant. It is the proof that something is at work, in farther fertilizing the soil.

The sowing of gypsum has produced another and great revolution in farming, and materially lessoned the labors of the farmer. It is by making it unnecessary for fields to lay a season to fallow, by which not only the use of the land is lost for the season, but you save the labor of ploughing it two, and often three times for a subsequent crop of wheat. How much simpler and more profitable the process now. One year you sow your field with oats, barley, &c., in the spring, at the same time you put on your clover seed and plaster. The subsequent year you have a fine field of clover, enough to cover the ground completely, and affording abundance of food for your stock for grazing. You fatten them at the same time that you fatten your soil. The coming autumn the remains of the clover are turned under with a single ploughing—you sow on your wheat—apply your drag, and your work is done. The chance is, you will have a much better crop than by the old method of frequent ploughing and fallowing, even if you have added to your fallow land a thin covering of stable manure. When clover can be made to grow so thrifty as to crowd out all other plants, which is frequently the case, it is the best preparation that our soil in the present state of farming can possibly have. But it must have only one ploughing. The clover lay well turned over, must be permitted to remain there

* See Genesee Farmer, vol. 3, p. 190.

according to modern experience, and a heavy crop of wheat or corn is almost the invariable result. A.

From the Transactions of the Essex (Mass.) Agricultural Society for 1832.

UPON EXACT AND EXPERIMENTAL AGRICULTURE.

My friends, the farmers of Essex county, will not be offended if I presume to urge them upon one or two points, which I deem of great importance to their agricultural improvements; and they will pardon a freedom and earnestness, which they know spring wholly from an honest pride in the honor and a strong desire for the success of their intelligent and enterprising association. Though removed from their immediate vicinity, I am not the less interested in whatever concerns a county, endeared as the residence of my remote ancestors, who among the earliest emigrants made it their resting place, and, with their descendants for years, participated in its privileges and blessings.

The first matter which I suggest to you is exactness in your agriculture The neglect of this is almost universal, and to its great disgrace, may be said to be characteristic of the farming profession. In my intimate intercourse with farmers for years, nothing has been more remarkable, and nothing in many cases more mortifying and provoking, than this want of exactness. They measure nothing; they weigh nothing. It is all guess work with them in every thing. Ask them how much land they till or mow?—they do not know. How much corn, rye, oats, barley, how many potatoes, they raised? —they did not measure them. How much hay they mowed?—they guess about so many loads. How much their corn or their potatoes yielded?—why, they judged about so and so; but this judgment is altogether the merest guess work. How much manure they put upon an acre?—why, they mean to put on, commonly, for there are always qualifications enough to save their veracity, about six, or eight, or ten loads, as the case may be; but what they call a load is, with themselves, and must be with others, matter of pure conjecture How much seed they sow to an acre?—why, as near as they can guess, about so much. How much will a favorite cow yield?— why, she gives over a pailful; but what is the size of the pail, whether six, or eight, or ten quarts, or whether wine quarts or beer quarts, which makes a difference of at least one fifth; or how much over, whether one quart, or four quarts, are points which it never occurs to them are important to be defined, or at least pretty exactly approximated, before they presume to demand the confidence of others, or indeed to place confidence themselves in their own statements.

Now I submit to you, my brother farmers, whether this is not an unvarnished statement of facts. Ought it to be so? Is such looseness or neglect admissible in any other of the business professions?

But what, you will ask, is the advantage of such exactness? We answer, very great. There is a satisfaction in knowing what we do: If we do not, in fact, do so well as we imagine, let us not go on deceiving ourselves, but ascertain the occasions of the failure. If we in fact do better than we imagine, let us enjoy the pleasures of conscious improvement, and let it furnish a stimulus to greater efforts.

Exactness is important in the next place, in order that a man should compare the value of his crops with the expenses of cultivation; and of each crop with its particular expense; that he may determine how far he is a gainer or a loser by his operations; and in what respects one crop may have the advantage over another; that he may determine which will best repay him his care and labor. But he can never do this, and he is liable to the grossest mistakes, both in judgment and practice, without exact observation and measurement.

Exactness is important in the next place to the proper disposal of his crops. How can a farmer well calculate what he shall do with his crops, unless he first ascertains what he has? If he overrates them, he is liable to overstock his farm, and either be compelled to pinch his cattle, by which in the end he is sure to lose, or to purchase fodder, which few men can afford to do; or if he underrates them, not keep stock enough, and with the feeling of abundance be very likely to use his produce prodigally and wastefully, and so fail of the advantages within his reach. Exactness is in the next place important to a man's character and usefulness. Agricultural operations approach so nearly to what may be called a creative power, that no class of people are more liable to have the organ of self-esteem powerfully excited than the farmers. Few men, therefore, are more disposed to boast of what they have done, and especially how much they have done. Some of their statements are so extravagant that they are made at the expense of all respect either for their judgment, or knowledge, or veracity. The fact is, they do not mean to impose on others, but they deceive themselves. It is all guess work with them. The effects of such misstatements are often very bad; and equally pernicious whether the result of mistake or design. The inexperienced and confiding are led into gross miscalculations by them. Now, a respectable man ought to have so much regard to his own honor as that, when he makes a statement, he may be sure it is founded in strict truth; but of this he never can be sure, unless he is in the habit of exact calculation and measurement; and no certain progress can be made in the science of agriculture without this exactness. Agriculture must be considered as one of the exact sciences; and we shall never know whether our progress in it is forward or retrograde, until we have done with guessing. I have myself been so frequently and egregiously deceived by the misstatements of men, who certainly did not mean to deceive, that I have long since determined to believe no statement, which a man has not verified by actual and exact observation, and then I am as willing to give my confidence as any man. I could give some of the instances to which I refer, but some of my friends, who are accustomed to draw a long bow, would recognize the likeness, and I should be sorry to give them as much pain as they have occasioned me disappointment.

But, you say, it is troublesome to be so exact. The trouble is not so great where the habit is once formed; and is very much more than compensated by the satisfaction experienced in doing it. Land may be measured with considerable correctness without the trouble of surveyor's instruments. The time occupied in planting, cultivating, and gathering a crop, can easily be taken account of. The manure cart can be measured, and then an account kept of the number of loads carried out. The seed can easily be measured. All vegetable crops, all grain crops are very quickly measured. Hay can easily be estimated in the cock or in the load, and the number of loads determined; or the size of a mow ascertained, and the amount of hay contained in it very nearly calculated. Then again, the amount of food consumed by different animals for a week at a time, at different seasons, can be ascertained with very little trouble; and a calculation of the whole amount required for them be made from these premises. The quality of the milk of a cow can easily be decided by setting a portion of it for cream in a glass vessel, and comparing it with others in the same way and under the same circumstances; or the milk of a particular animal can be placed by itself for a period of time, and her actual produce determined. All dairy produce is easily ascertained. The debit and credit sides of your sheep-fold too, and of your pig-sty, where, let me tell you, exactness is specially important, are easily kept. All these things ought to be done; and, I say again, that the satisfaction and advantages of doing these would greatly overbalance the trouble and care. Ask an intelligent and enterprising manufacturer about his concerns. He can tell you, if he deserves that character, how much power of water he has, even to an inch; how many spindles he can carry; how many pounds of wool or cotton he can work up; how much fuel, how much oil, how much dye-stuff he requires; how many pounds of wool or cotton are needed to make a yard of cloth of a certain degree of firmness; how much of human labor he can employ to advantage; and at what rate exactly he can afford to sell his cloth in order to get a living profit. Now is there any reason in the world, why a farmer should not be, as far as possible, as exact and calculating in his concerns as the manufacturer? would he not find an equal advantage in it? and is not the want of this exactness and care one of the great reasons why farmers in too many cases find their farms either an unprofitable or a losing concern, and in point of improvement are just where their fathers were a century ago? Keep a journal therefore; a diary. Keep an account of every field and every crop. Ascertain what it costs; what it comes to; what you have done for it, and what you do with it. Keep an account in some form with every domestic animal on your place. See whether they pay or how they can be made to pay for their living; whether you keep them for profit or pleasure. Do not be ashamed of mistakes and false judgments and miscalculations, unless you voluntarily run into them a second and a third time; because no human judgment is infallible, and the wisest are ever liable to err; and in the first place take care not to impose on yourself, and in the next place, when you undertake to tell your neighbors what you have done, be sure you are able to speak the truth, the whole truth, and nothing but the truth.

Next to exactness is another matter intimately connected with it, and of like importance to an improving agriculture, that of making experiments. You are too intelligent to indulge in the senseless clamor about agricultural experiments and experimental farmers. You know that in agriculture all knowledge is the result of experiment, and those are esteemed the best farmers, who have made the most experiments, that is, who have had the most experience and the longest practice. But perhaps you will say, let the rich make experiments, we have not the means. This is not so; and the farmers of moderate circumstances, and who work in their own fields, are the very persons to make the experiments, because they are better able to watch the result; and, as they cannot afford to lose, and are most concerned to make their agriculture profitable, will feel the stronger interest in the progress of such experiments.

Now very extensive or expensive experiments are not what we recommend to farmers of small means; but small experiments are perfectly within their reach, and the instruction to be gained from them on a small scale may be equally valuable and decisive as from those on a large scale. The effect of lime on your farms, or upon the different soils to be found in different parts of them; applied to corn or wheat, to potatoes, to grass; used in its air-slacked or unslacked state; how to be applied; when to be applied; all these are very important inquiries, and may be as easily ascertained by the use of a single cask, which may cost you a dollar, as by the use of fifty; and in any event you are certain that the lime is not wholly lost. So too with gypsum and ashes. Some of the most important points in regard to the application of these powerful manures remain to be settled by experiments. The result of such experiments may be of great importance to you; how they are to be applied; in what quantity, at what season; in what form, to what crops; under what circumstances they lose their efficacy; what kinds of plaster are to be chosen, the dark or the pink colored; how ashes are to be applied, whether leached or unleached; the comparative value of wood ashes, and of peat-ashes, with which your county abounds; all these important points can be determined only by experiment, and these experiments on such a scale as to decide them may be made by the smallest farmers, and at almost no expense. So too as to the application of other manures; by the most simple experiments and without cost, you can decide for yourselves the long mooted questions whether manures are best applied in a green or a rotten state, in the hill or spread; and buried by the plough or scattered on the surface and barely covered with a harrow.

So likewise in regard to your crops: you can as well ascertain on a quarter of an acre as on a quarter of a hundred, whether your soil will bear

wheat or not, or by the application of lime or soaper's waste may or may not be made to bear it; whether the autumn or the spring wheat is best for you; whether your corn or potatoe crops were better planted in hills or in drills, and at what distances; whether your grass seed may better be sown in the fall or the spring, by itself or with other crops; and whether, after a fair trial of the expense and value of the produce, you would find it for your advantage to cultivate for the feeding of your stock large quantities of vegetables, such as potatoes, carrots or turneps; or to confine yourself to Indian corn and grass. These experiments would lead, if carefully conducted, to most valuable results, and for all practical purposes, are as much within the power of the farmer in moderate as the farmer in affluent circumstances

Next in regard to your domestic animals, do not be offended if I ask you, how many of you can tell me how much hay and provender it requires ordinarily to keep a horse? how much a yoke of medium sized oxen, worked or not worked? how much a common milch cow? how much your yearling and two year old heifers and steers? and how near their labor, their produce, or their growth comes towards defraying their cost? These animals are kept at great expense beyond a question The keeping of them a part of the year is not necessary for their labor to all of you, nor for their manure to some of you, who can procure this article in abundance either from the sea shore or from the neighoring livery stables. These then are most important points, which can only be decided by actual experiment, and such experiments require nothing more than a little trouble or attention, in measuring their food for a certain time. Very few of you would I believe be able to answer these questions with any thing like certainty. The amount of hay, for example, required for wintering a cow, is estimated by different individuals at from one and a quarter tons to two tons and a quarter. This, where hay is a cash article, is a very important difference; and though there will be differences in the size and appetites of different animals, yet most certainly we might more nearly than that approach the determination of the quantity. So too with respect to feeding of oxen and horses, not only as to quantity, but the kinds of feed which may be most profitably applied,—corn fodder, English hay, salt hay, corn, meal, oats, food cooked or uncooked,—many queries arise, which can only be settled by experiments, careful experiments; and may be settled by experiments which would cost nothing.

In regard likewise to the keeping of swine, every farmer who keeps one may soon settle for himself, by actual experiment, the often discussed question of their profit or loss; and other points of equal importance, relating to the kinds of food which may be most profitably, if profitably at all, given them.

These, and such experiments as these, I recommend most earnestly and most respectfully to the Essex farmers to make and to repeat and to report. The results of them, and the faithful and exact communication of those results to the public through the Society, will be of the greatest benefit both to individuals and to the community. In my opinion the Society could not better appropriate some portion of their funds than in the encouragement of such experiments, by giving, where they are well conducted and fully detailed, whether successful or not, such pecuniary gratuities to those who conduct them, as in their judgment they may merit, and as shall stimulate them to further inquiries, though such objects of premium are not, from the necessity of the case, previously promised in their publications.

Facts in agriculture are the instructors, which are most needed. The advances of the science have been necessarily slow; but who can doubt that there are yet many more truths to be discovered, other mysteries in nature to be solved; and much more light to break forth on a subject so essentially connected with human subsistence and comfort, and the general welfare. He who assists to settle the most simple truth, and to solve the least of these and other controverted points, is to be deemed a public benefactor. He who brings but a single pebble to the heap, may feel a just claim to his share in the honor of contributing to the substantial foundation on which the subsistence of animal life, the exercise of all intellectual and moral energy, and the improvements and comforts of human society, primarily and mainly depend; agriculture, the mother of all the arts and the basis of all national prosperity.

HENRY COLMAN.

A NEW BEE HOUSE.

We have seen a bee-house, the method of constructing which was introduced into our county by Mr. Asher Wilcox, of Solon, and which is said to be a very valuable improvement. Several individuals have tried it, with entire success. It consists of a house of brick or wood, (if of wood, standing on stakes,) say of the size of a common smoke-house, with a door to admit of the entrance of a man. The inside is merely furnished with shelves like an ordinary pantry. The bees pass in and out through several apertures resembling spouts, arranged in rows on each side. These spouts project six inches, and the hole is perhaps two or three inches wide by from an eighth to one half an inch in height. The benefits of this method are said to be these: The bees never swarm, but continue filling up the house; the honey may be easily taken out, when the bees retire to the bottom of the combs in cold weather; and it is said to be an infallible preventive of the worm, and the *light fingers* of the night gentry. —*Cortland Advocate.*

SWINE.

This is an animal so useful to the farmer in the supply of food, that we must give it a passing notice. The hog is found in all the temperate climates, but was not known in America until introduced by the Spaniards, since which they have spread throughout almost every part of it. There are now so many varieties of the breed, that it is unnecessary to dwell on any one of them, as almost every town has its peculiar kind. It is however extremely important to the interest of the farmer that he has a profitable breed, as there is a marked difference in this animal as to its capacity to fatten. They ought to have depth of carcase, lateral extension, breadth of loin and breast, proportioned length, moderate shortness of the legs, and large gammons, with good fore legs. These are essentials; they are qualities which will produce a favorable balance in the amount of keep, and a mass of weight which will pull down the scale. Whatever kind or breed of swine is preferred in the raising of stock, the most perfect animals, both male or female, ought always to be selected to make the raising or breeding of them profitable to the farmer. The time is now approaching when we ought to look to our stock of hogs, and the thousand varieties of garbage, the surplus of the kitchen, cellars and barn, ought to be carefully fed to them, which, with the sour milk that a farm has to spare, will soon put them in a thriving condition A small pasture lot, particularly an orchard where they can have the benefit of the young apples that fall, and of which they are very fond, will add much to their appearance and growth, so that with the dropping of the grain in the wheat fields, which they will carefully pick up, and the early pumpkins as they begin to ripen, will almost bring them into a state fit for the butcher. Hogs fed, or rather treated, in this way, will require very little corn or peas to make them marketable, and will make ample returns for the little labor or expense bestowed in fattening them. This pork will not cost over $2 00 per cwt., and it is the only way in which it can be made profitable. To fat hogs on corn in this day of improvement, without this previous preparation, is very bad policy, and ruinous to the farmer, because the grain required in the fattening of them is of more value in market than the animal so fattened. It is important therefore to the farmer, that he should now look to his hogs, and by taking time by the forelock, when fall comes they, without much extra expense, will be at any time ready for the market. A breed has lately been introduced on Long Island, which at fifteen and eighteen months of age, with ordinary keeping, will weigh between 400 and 500. This kind has a remarkable propensity to fatten —*Columbia Sentinel.*

A CURIOSITY.—Most persons have heard of a wheel within a wheel, but few, we apprehend, of an egg within an egg. Such an one however we were shown on Monday by Mr. Nickerson, the jailer who has it now in his possession. The egg has no yolk visible, but in place of it there is another egg about the size of a plum, with a shell as hard as the outer shell. This little inside egg, which resembles one of Capt. Symmes' concentric spheres, has no "polar openings," and its interior has not been explored, but from its opacity it is thought to be all yolk. Will the naturalists tell us what would have been the effect of incubation upon the larger egg?—*Kennebec Jour.*

ERRATA.

In Hints to Farmers, No. 8, p. 146, 3d line, for fruitful read *suitable*, before "rewards."

In 11th line, 2d paragraph, for civil, preceding "virtues" and "rewards," read *civic.*

In 4th paragraph, 7th line, for fine sum, read *snug* sum.

Page 157, column 1, paragraph 3, and 14th line, for co-operating upon *each other*, read co-operating upon the plants. Line 15, for *the plants* read *them.*

Pages 201-2 in the article on Draining for larse, read *carse.*

P. 207, col. 2, for Dishby read *Dishley*—for Southdam, read *Southdown.*

NEW YORK MARKET.

Saturday, July 13

Potashes are a little flattened from the prices they obtained three days ago: The last sales were at $4 15. Pearls, on the contrary, have advanced and command $4 60.

Cotton continues to be the article of chief interest, and the operations of speculators, together with the purchases of manufacturer's hemp creates a brisk action in the market: the sales of the week are about 5000 bales, and the advance in price nearly a cent a pound. In domestic cotton goods a speculative movement has commenced, based on the advance of the raw material.

In dye woods there is no material change to note. Mackerel are at very full prices, except new, No. 3, which are getting plenty.

Molasses has come in from various directions and in the almost total absence of demand prices have settled a little.

Turpentine sells at $2½. Rice is getting better, the sales of the week are 6000 tces. Extensive sales of olive oil in casks at 90a92½ cts., and a lot of brls at 95 cts: the article is now held higher in consequence—whale oil, 28½ cts. Provisions at full prices. The heavy stock of coarse salt having been disposed of, there is now a good demand, sales of T. Island at 44 cts. bu. The sales of Muscavado sugars have been on a liberal scale at full prices. In tobacco the sales are larger than usual, and prices advancing.

The prices of flour have not varied much during the week. Western is now 5¼a¾; Southern maintains the advance it acquired last week. A lot of Genesee wheat sold at 120 cts. North rye is up to 80 cts. Southern corn to 65a67, and northern to 75. Whalebone 16 cts.—*Jour. of Com.*

Rochester Prices Current.

Wheat, per bu.	1 06	Apples,	1 00a1 50
Flour, per brl.	5 25	Lard, cwt.	8 00
Pork, mess, brl.	14 00	Cheese do	6a9 00
do prime do	10 00	Butter	12½ 00
Beef per cwt.	3a4 00	Hams do	7a8 50
Oats	34	Pot Ash, cwt.	3 50
Corn	63	Pearls,	3 75a4 00
Rye	75	Hides, cwt.	5 00
Barley	50a56	Sole Leather,	19a22 00
Hay, per ton,	8a9 00	Harness do	25 00
Grass Seed,	1 25	Upper p side, drs'd	2 25
Potatoes,	25a37½	Bundle do	3 00a3 50

MR. PERRY'S ADDRESS.

Extracts—continued from page 223.

TRESPASSES UPON GARDENS, ORCHARDS, &c.

Somewhat of the same character is a wanton and shameless liberty which many persons take in respect to others' enclosures. I feel happy in bearing testimony to the general good morals of the people in this county, to their general correct views on the subject of property, and to the ease and safety which all feel in their persons and their possessions. Still, all things are not as they should be. The subject to which I have reverted is one in which the sentiments and habits of many of our citizens need reform. Our fields, our orchards and our gardens, are not safe from the intrusion of those who may think it a little nearer to make their way through them than to follow the road which the public have provided. Fields in every state of cultivation, ploughed, planted, sowed, and leveled, green with the tenderness of spring or crowned with the flowing harvest, are passed in every direction by young and old, male and female, learned and unwise. No one intends an injury, and the injury done by an individual is small, yet the amount of the whole is considerable. This licentiousness extends beyond mere travel. No one thinks of stealing, yet the trees of early and choice fruit are spoiled by little and little by those who wish just to know how it tastes, and the owner is often the only person in all the neighborhood who has not had his part. Melons are taken from the vines, and portions of almost all pleasant things are sequestered, by those who have a taste to gratify, but not energy enough to produce for themselves, nor spirit enough to pay for their own gratifications, nor even civility enough to ask, (which in the large proportion of instances would be all that is required,) for what they so intensely desire. I once knew a field owned by a person who possessed some taste for improvement, and who had been at some expense to introduce into it specimens of better fruits and choice vegetables, in relation to which I have heard the neighbors say, that the injury sustained by the licentiousness of which I am now speaking, could not be less than eight or ten dollars a year for a dozen years in succession. This makes a considerable sum, and was a serious loss to the individual, whose means were small; great as it was, the perplexity, vexation and frequent disappointment in experiments upon certain articles, were still greater. The discouragement which is thus spread through the community is more serious still. From the loss and perplexity produced in this way, many persons, (I think very erroneously,) have been induced to cut down trees which they had cultivated with much pains and expense, and many more have been prevented from any attempts to raise them, from the little prospect that they would be permitted to enjoy the produce when brought to maturity.

MEANS OF CORRECTING THESE EVILS.

It is certainly desirable that these evils and discouragements should be removed. And I think as your plans for improvement advance, the sentiments and habits of the community on this subject will improve. But I apprehend you should not remain satisfied with the slow reform which would thus be produced. The evil as it now exists is one of the greatest and most extensive hindrances with which the Society has to contend. I must suppose it both their duty and interest, to put forth a direct and powerful effort to stop this injurious and troublesome practice. The attention of the community, I think, should be called to the subject by an able and special appeal, addressed to their understanding, their moral feelings and their interest; and where the dictates of reason, a sense of justice, and the generous feelings, prove ineffectual, the restraint of law should be called in. And I know of no body of men, considering their high standing in the respect and confidence of the community, their situation scattered through the county, and the object of their association, by whom such an appeal could with greater propriety be made, and if made, promise better success, than by those of this association; and I firmly believe that the success of this institution, and the moral state of the county in the coming generations, depend much on the fact whether this effort be made, or things be suffered to go on in their present course.

ANNUAL REPORTS TO BE MORE GENERALLY CIRCULATED.

You will permit me here to pass from a consideration of hindrances which present themselves to retard agricultural improvements, hindrances which will, however, certainly give way before your enlightened and well-directed efforts, to the notice of some increased if not new efforts which appear to me connected with a wider and more speedy accomplishment of the commendable designs of your institution. In this connexion I will suggest that a more general circulation of the Annual Reports, and other publications of your Society, is needed. Since called upon to give this address, I have looked over most of the printed documents of this Society anew,—I had read many of them before,—the result of which has been a deeper conviction of the wisdom and spirit with which its operations have been conducted. Information on subjects of general importance is there given in an intelligible manner. Information, too, which I know from my own experience, it would be for the general interest were it more commonly possessed and regarded. It may be asked what more can be done than to collect, embody and send abroad the information contained in these publications. You will permit me to observe, that your reports, (and the observation might with the same propriety be extended to almost all useful institutions,) are not made common enough. Comparatively few who need them most ever see them; should you go through the county you would find many who had never seen any of them, and vast numbers more who had only seen incidentally a few, or parts of them. The fault may be their own; your object however is to enlighten the ignorant and rouse up the inactive, and call into exercise the dormant powers of society. Your success depends, in part at least, as does that of every desirable effort, in taking land yet uncultivated, exciting minds yet unaffected, sending light and improvement where there is yet darkness.

CHEAP AGRICULTURAL ESSAYS TO BE DISTRIBUTED.

As a means of doing this, large and cheap editions of your reports, or parts of them, should be printed, and effectual means put in requisition to circulate them gratuitously, or at the lowest possible price, among those who remain yet unmoved.

2. The tract system might usefully be brought into operation here. This is an engine of immense power in the hands of whatever body of men and for whatever purpose employed, and as might be expected the enemies and the friends of truth have availed themselves of its influence; good or evil, according to the character of the effort, has, to an incalculable extent, always been the result. Those who have worthy objects and where this means can be brought in, should be forward to avail themselves of its help. It appears to me that this power is well suited to the object of this Society, and perfectly within your means. Short essays, plain, practical, and pertinent, on subjects of local and county interest, illustrated when necessary with lithographic or other cuts, printed in a cheap form, and circulated extensively through the county, particularly among those who have taken but little interest in the improvements that are going on, could not but be attended with the best effects. It is a mistake to suppose that because men have hitherto been inactive and without interest in a good cause, they can never be drawn into countenance and to help it on. There are many men, strong in nerve, vigorous in mind, or rich in wealth, who ought, and may be induced, to come in as active and efficient helpers.

OCCASIONAL LECTURES ON AGRICULTURE.

3. I will suggest also the expediency of holding meetings in different parts of the county and at convenient seasons of the year, not for exhibition, but to communicate information: at which time *Lectures* should be given on subjects of general utility by persons appointed for the purpose, and on subjects assigned them. In this way a greater interest would be excited, better lectures ordinarily secured, and when judged expedient, particularly adapted to the wants and interest of that part of the county where the meeting is held. With the talent possessed by the members of the Board of Managers and the zeal felt by them, it would not be difficult to secure from their own body men enough to perform this service for some years; there are, too, many other public-spirited and able men, who if specially invited, would give an enlightened and encouraging assistance to an undertaking of this kind. Every such lecture would kindle up a new spirit in the neighborhood where it was delivered, keep up inquiry where an interest was already felt, preserve in remembrance the Society and its objects, new subscribers would be obtained, and thus new talents and new interest secured to your cause.

COMMITTEE IN TOWNS TO COLLECT INFORMATION.

I will ask whether it would not be well to appoint local or town committees, who should be requested to collect and communicate to the Society information of any instances of good cultivation, or new articles of produce or manufacture, and whatever else they may think of common interest within their respective towns. There are no doubt many instances of good husbandry and useful inventions and easy methods of accomplishing business in the county, of which there is no general information, and of which the public, under existing circumstances, are not likely to be made speedily acquainted. There are many truly worthy and skilful farmers and mechanics, who not being much accustomed to the pen, feel a reluctance, and indeed would meet with some difficulty in making out a written account of their operations, who at the same time would readily communicate in conversation all the information necessary to enable those used to writing to give a full and useful account of their improvement and successful experiment. Information relating to such customs and other useful and important subjects might reasonably be expected from the proposed committees; for not only their own public spirit, but the character and reputation of their towns, would excite them to activity and promptness in the business to which they were appointed.

HORTICULTURE ESSENTIAL TO THE FARMER.

Horticulture is so much associated with the general principles of the Society, and so interesting and profitable in itself, that I will not pass over this opportunity of suggesting the expediency of some efforts on your part to encourage a more general attention to it. Large portions of our citizens and professional men, merchants, and mechanics, have or might easily have small enclosures, which it would be much to their advantage in point of property, health and morals, to cultivate. If this were done in a neat and skilful manner, it would add greatly to the appearance of their places, and spread over the county many new attractions. A garden is a most lovely appendage to a great farm, and is sure to afford a double reward, in pleasure and comfort, for every hour's labor in it. Those who have never effectually tried the experiment, may profess to doubt this observation, and farmers who keep no particular account of their daily expenses, may say that they cannot afford time to cultivate one. But experiment will produce the conclusion in most minds which I know it did in one intelligent citizen of the county, who said, 'before I tried, I thought I could not bear the expense of a garden but now I can hardly conceive how I bore the expense of a family without one.'

200,000 White Mulberry Trees.

THE Subscriber has on hand and for sale, 200,000 WHITE MULBERRY TREES, of two and three year's growth, which have been transplanted, are in a healthy and thrifty condition, and which he offers for sale at $1,50 $2,00 per hundred, delivered at the nursery. Also, a few of the Morus Multicaulis, or Chinese White Mulberry. ASA BUTLER.

P. S. All orders, *Post paid* will be punctually attended to.

Suffield, Conn., April 1st, 1833. ap20 f3m